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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,657

07/19/2005

Hiroaki Sudo

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EXAMINER

DONABED, NINOS J

ART UNIT

PAPER NUMBER

4177

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/542,657	<b>Applicant(s)</b> SUDO, HIROAKI	
	<b>Examiner</b> Ninos Donabed	<b>Art Unit</b> 4177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/19/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. Documents under the foreign documents, 2004/15143 and 2004/282249 were not taken into consideration by the examiner because an English translation abstract was not present at the time of examination.

All documents under other documents that are stricken through were not considered by the examiner because copies of them were not provided with the application.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 3, 6, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claims 2, 3, 6, and 7,

The term variable is indefinite because it can have a plurality of different meanings, which will change the scope of the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Venkitaraman (United States Patent Application Publication 2003/0185196).

Regarding **Claim 1**,

Venkitaraman discloses a communication system comprising:

a mobility anchor point which is connected to a plurality of access routers and which issues a care-of address to a communication terminal apparatus communicating with said access routers; **(See figure 1 and 2 and paragraphs [0022] - [0025], a mobility anchor point is connected to access routers and a care-of address is issued to the mobile node.)**

the access routers which communicate with the communication terminal apparatus and transmit the care-of address to the communication terminal apparatus; **(See figure 1 and 2 and paragraphs [0022] - [0025], the access routers transmit the care-of-address to the mobile node.)**

a network which connects the mobility anchor point and the access routers, and transmits the care-of address to a home agent to which the communication terminal apparatus belongs; and **(See figure 1 and 2 and paragraphs [0022] - [0025], a network connects the mobility anchor point and access routers to a home agent with which a mobile node belongs to.)**

the home agent which stores the care-of address and a home address in association with each other for each communication terminal apparatus, and transmits data that is transmitted to the home address of the communication terminal apparatus to a destination indicated by the care-of address, **(See figure 1 and 2 and paragraphs [0025] - [0026] and Claim 8, a home agent stores the care-of-address and the real address and transmits data to the mobile node.)**

wherein the mobility anchor point issues to a communication terminal apparatus communicating with an access router of an adjacent cell to a cell of a mobility anchor point to which said communication terminal apparatus does not belong, another care-of address that is effective in the cell of said access router and said adjacent cell. **(See figure 1 and 2 and paragraphs [0017] - [0025], a new care-of-address is provided when the mobile node moves to a new location.)**

Regarding **Claim 5**,

Venkitaraman discloses a communication method, in a communication system comprising:

a mobility anchor point which is connected to a plurality of access routers and which issues a care-of address to a communication terminal apparatus communicating with said access routers; **(See figure 1 and 2 and paragraphs [0022] - [0025], a mobility anchor point is connected to access routers and a care-of address is issued to the mobile node.)**

the access routers which communicate with the communication terminal apparatus, and transmit the care-of address to the communication terminal apparatus; **(See figure 1 and 2 and paragraphs [0022] - [0025], the access routers transmit the care-of-address to the mobile node.)**

a network which connects the mobility anchor point and the access routers, and transmits the care-of address to a home agent to which the communication terminal apparatus belongs; and **(See figure 1 and 2 and paragraphs [0022] - [0025], a network connects the mobility anchor point and access routers to a home agent with which a mobile node belongs to.)**

the home agent which stores the care-of address and a home address in association with each other for each communication terminal apparatus, and transmits data that is transmitted to the home address of the communication terminal apparatus to a destination indicated by the care-of address, **(See figure 1 and 2 and paragraphs [0025] - [0026] and Claim 8, a home agent stores the care-of-address and the real address and transmits data to the mobile node.)**

wherein another care-of address is issued, to a communication terminal apparatus communicating with an access router of an adjacent cell to a cell of a mobility

anchor point to which said communication terminal apparatus does not belong, that is effective in the cell of said access router and said adjacent cell. **(See figure 1 and 2 and paragraphs [0017] - [0025], a new care-of-address is provided when the mobile node moves to a new location.)**

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 3, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venkitaraman.

Regarding **Claim 2** as best understood,

Venkitaraman teaches the communication system according to claim 1.

Venkitaraman further teaches a mobility anchor point which issues a care-of-address to the mobile node **(See Figure 1 and 2 and paragraphs [0005], [0017], [0020] – [0027])**

Venkitaraman does not explicitly teach wherein the mobility anchor point issues a care-of address which is variable in a plurality of cells and effective in the cell of the access router and the another cell adjacent to the cell.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that mobile devices passing through different cell areas should be given a different (variable) care-of-address and effective in the cell of the access router and the another cell adjacent to the cell because this will help protect the integrity of the mobile connection in a specified area.

Regarding **Claim 3** as best understood,

Venkitaraman teaches the communication system according to claim 1.

Venkitaraman further teaches a mobility anchor point which issues a care-of-address to the mobile node (**See Figure 1 and 2 and paragraphs [0005], [0017], [0020] – [0027]**)

Venkitaraman does not explicitly teach wherein the mobility anchor point makes the number of cells variable, the cells effective in another care-of address to assign to the cells on a boundary of the mobility anchor point.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that when a mobile node travels from one cell area to another defined by a different mobility anchor point that a new care-of-address will be issued to the mobile device. The reason this would have been evident is because assigning a new care-of-address when a mobile node went into a different area would help protect the integrity of the connection.

Regarding **Claim 6** as best understood,



Venkitaraman teaches the communication method according to claim 5.

Venkitaraman further teaches a mobility anchor point which issues a care-of-address to the mobile node **(See Figure 1 and 2 and paragraphs [0005], [0017], [0020] – [0027])**

Venkitaraman does not explicitly teach wherein issued is a care-of address which is variable in a plurality of cells and effective in the cell of the access router and the another cell adjacent to the cell.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that mobile devices passing through different cell areas should be given a different (variable) care-of-address and effective in the cell of the access router and the another cell adjacent to the cell because this will help protect the integrity of the mobile connection in a specified area.

Regarding **Claim 7** as best understood,

Venkitaraman teaches the communication method according to claim 5.

Venkitaraman teaches a mobility anchor point which issues a care-of-address to the mobile node. **(See Figure 1 and 2 and paragraphs [0005], [0017], [0020] – [0027])**

Venkitaraman does not explicitly teach wherein the number of cells is made variable, the cells effective in another care-of address to assign to the cells on a boundary of the mobility anchor point.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known that when a mobile node travels from one cell area to another defined by different mobility anchor point that a new care-of-address will be issued to the mobile device. The reason this would have been evident is because assigning a new care-of-address when a mobile node went into a different area would help protect the integrity of the connection.

9. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Venkitaraman in view of Chubbs, III. (United States Patent Number 6,400,304).

Regarding **Claim 4**,

Venkitaraman teaches the communication system according to claim 3.

Venkitaraman further teaches a mobility anchor point which issues a care-of-address to the mobile node when it is within the coverage area of the mobility anchor point. **(See Figure 1 and 2 and paragraphs [0020] – [0029])**

Venkitaraman does not explicitly teach wherein the mobility anchor point detects moving speed of a communication terminal apparatus, and when communicating with a communication terminal apparatus moving at high speed, issues the another care-of address to a larger number of cells than in a case of communicating with a communication terminal apparatus moving at low speed.

Chubbs, III. Teaches an integrated GPS system which can detect the speed of a car. **(See Abstract and Column 1 Line 60 – Column 2 Line 26.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine Venkitaraman with Chubbs, III because GPS systems commonly detect speed of vehicles and mobile nodes are commonly used in vehicles, thus a combination of the inventions would provide for a mobility anchor point system which could detect the speed of a mobile node.

The mobility anchor point after knowing the speed of the mobile node using the GPS system could have issued another care-of-address to a larger group of cells after detecting the speed of the mobile network because this would help increase the efficiency of the connection during handoff of the mobile device, and ultimately protect the integrity of the mobile connection.

Regarding **Claim 8**,

Venkitaraman teaches the communication method according to claim 7.

Venkitaraman further teaches a mobility anchor point which issues a care-of-address to the mobile node when it is within the coverage area of the mobility anchor point. **(See Figure 1 and 2 and paragraphs [0020] – [0029])**

Venkitaraman does not explicitly teach wherein the mobility anchor point detects moving speed of a communication terminal apparatus, and when communicating with a communication terminal apparatus moving at high speed, issues the another care-of address to a larger number of cells than in a case of communicating with a communication terminal apparatus moving at low speed.

Chubbs, III. Teaches an integrated GPS system which can detect the speed of a car. **(See Abstract and Column 1 Line 60 – Column 2 Line 26.)**

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have known to combine Venkitaraman with Chubbs, III because GPS systems commonly detect speed of vehicles and mobile nodes are commonly used in vehicles, thus a combination of the inventions would provide for a mobility anchor point system which could detect the speed of a mobile node.

The mobility anchor point after knowing the speed of the mobile node using the GPS system could have issued another care-of-address to a larger group of cells after detecting the speed of the mobile network because this would help increase the efficiency of the connection during handoff of the mobile device, and ultimately protect the integrity of the mobile connection.

### ***Conclusion***

10. Any response to this Office Action should be **faxed** to (571) 272-8300 or **mailed** to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

***Hand-delivered responses should be brought to***  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, Virginia 22314

Art Unit: 4177

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ninos Donabed whose telephone number is (571) 270-3526. The examiner can normally be reached on Monday-Friday, 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ninos Donabed  
Art Unit 4177

/Benny Q Tieu/  
Supervisory Patent Examiner, Art Unit 4177